

AMENDMENTS TO THE CLAIMS

Please cancel claims 22-31, 34, 44 and 49-52 without prejudice or disclaimer of the subject matter set forth herein.

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of claims:

1-27. (canceled)

28. (currently amended) ~~The method of claim 22~~ A method for preparing an electrophoretic separation article comprising:

i) providing a support comprising a silicon-containing material and washing at least a portion of a surface of said support for contacting an electrophoretic matrix with a weakly alkaline solution; and

ii) filling or coating said support with an electrophoretic matrix;

thereby obtaining an electrophoretic separation article;

in which the electrophoretic matrix is a composition comprising acrylamide or a derivative thereof or a polymer thereof, and at least two organic solvents.

29-31. (canceled)

32. (currently amended) An electrophoretic gel comprising a polyacrylamide polymer or a polymer comprising an acrylamide derivative, and two or more organic solvents~~The electrophoretic gel of claim 29,~~ in which one of the organic solvents is formamide.

33. (currently amended) The electrophoretic gel of claim ~~31~~32, in which a second organic solvent is ~~formamide~~an alcohol.

34. (currently amended) The electrophoretic gel of claim ~~29~~32, which further comprises a water-soluble polymer.

35. (previously presented) The electrophoretic gel of claim 34, in which the water-soluble polymer is a dextran, polyethylene glycol or cellulose.

36. (previously presented) A process for preparing an electrophoretic gel comprising polymerizing a composition comprising acrylamide or a derivative thereof in the presence of at least two organic solvents.

37. (previously presented) The process of claim 36, in which the composition comprises a derivative of acrylamide that is N,N'-dimethylacrylamide or N-(hydroxymethyl)acrylamide.

38. (previously presented) The process of claim 36, in which one of the organic solvents is an alcohol.

39. (previously presented) The process of claim 38, in which the alcohol is methanol.

40. (previously presented) The process of claim 36, in which one of the organic solvents is formamide.

41. (previously presented) The process of claim 38, in which a second organic solvent is formamide.

42. (previously presented) The process of claim 36, in which the composition further comprises a water-soluble polymer.

43. (previously presented) The process of claim 42, in which the water-soluble polymer is a dextran, polyethylene glycol or cellulose.

44. (canceled)

45. (previously presented) A process for electrophoretic separation of a sample comprising applying said sample to an

electrophoretic separation article comprising an electrophoretic gel comprising a polyacrylamide polymer or a polymer comprising an acrylamide derivative, and two or more organic solvents, and separating the sample by applying an electric field electrophoretic separation article.

46. (previously presented) The process of claim 45, in which the electrophoretic gel further comprises a dextran, polyethylene glycol or cellulose.

47. (previously presented) The process of claim 45, in which the sample comprises a nucleic acid or a peptide nucleic acid.

48. (allowed) The method of claim 45, in which the sample comprises a DNA or a RNA.

49. (currently amended) The method of claim 45, in which the ~~polar~~organic solvent comprises formamide or an alcohol or a mixture thereof.

50. (previously presented) The method of claim 49 in which the alcohol is methanol.

51-52. (canceled)

53. (new) The electrophoretic gel of claim 33, in which the alcohol is methanol.